#### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298





EA2018-800

Dean McFarren
Manager – EAM Distribution Compliance
Pacific Gas and Electric Company (PG&E)
1850 Gateway Blvd., 5<sup>th</sup> Floor, Room 5053C
Concord, CA 94520

SUBJECT: Electric Distribution Audit of PG&E Sonoma Division

Mr. McFarren:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Ivan Garcia, Chris Lee, and Charles Mee of ESRB staff conducted an electric distribution audit of PG&E's Sonoma Division from May 14, 2018 through May 18, 2018. During the audit, ESRB staff conducted field inspections of PG&E's facilities and equipment and reviewed pertinent documents and records.

During the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response within 30 days of your receipt of this letter indicating all corrective actions and preventive measures taken or planned to address the violations to ensure compliance with GO requirements. The response should indicate the date of each remedial action and preventive measure completed within 30 days. For any outstanding items not addressed within 30 days, please provide the projected completion dates of all actions for all violations outlined in Sections II & IV of the enclosed Audit Findings.

If you have any questions concerning this audit, please contact Ivan Garcia at (916) 928-5875 or <a href="mailto:ivan.garcia@cpuc.ca.gov">ivan.garcia@cpuc.ca.gov</a>.

Sincerely,

Banu Acimis, P.E.

Program and Project Supervisor

Electric Safety and Reliability Branch

Safety and Enforcement Division

California Public Utilities Commission

Enclosure: CPUC Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC Lee Palmer, Deputy Director, Office of Utility Safety, SED, CPUC Charlotte TerKeurst, Program Manager, ESRB, CPUC Ryan Yamamoto, Senior Utilities Engineer – Supervisor, ESRB, CPUC Ivan Garcia, Utilities Engineer, ESRB, CPUC

#### **AUDIT FINDINGS**

#### I. Records Review

During the audit, ESRB staff reviewed the following records:

- Reliability Metrics from April 2013 to March 2018
- Patrol and Inspection Records from April 2013 to March 2018
- Completed Corrective Action Work Orders from April 2017 to March 2018
- Cancelled Corrective Action Work Orders from April 2017 to March 2018
- Pending Corrective Action Work Orders from April 2018 to March 2018
- Pole Loading Calculations from December 2016 to April 2018
- New Construction Projects from April 2017 to March 2018
- Third Party Notification Records from April 2013 to March 2018
- Diagnostic Equipment Testing Records from January 2015 to December 2017
- PG&E Sonoma Inspector Training Records from January 2013 to April 2018
- PG&E's Internal Audit Summary for Sonoma Division in 2014, 2015, and 2017.
- PG&E's Compliance Supervisor Work Verification for Sonoma Division from January 2017 to April 2018

#### II. Records Violations

ESRB staff observed the following violations during the record review portion of the audit:

#### 1. GO 95, Rule 18-A2a states in part:

"All companies shall establish an auditable maintenance program for their facilities and lines. All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or nonconformances with General Order 95 on the company's facilities."

#### GO 95, Rule 31.1, Design, Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment."

## GO 128, Rule 17.1, Design, Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of [the] communication or supply lines and equipment."

ESRB staff reviewed late work orders and determined that PG&E did not address a total of 405 work orders by the assigned due date.

## 2. GO 128, Rule 17.2, Inspection states in part:

"Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements these rules."

## GO 165, Section III-B, Standards for Inspection states in part:

"Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1."

ESRB noted that PG&E completed the underground inspection for the following map past their assigned due date:

Map II2909 – Inspection due on June 8, 2017. PG&E completed the inspection on December 1, 2017.

## III. Field Inspection

The following are the facilities we inspected during the field inspection:

| Structure Type | Structure Number | Address                       | City                       |
|----------------|------------------|-------------------------------|----------------------------|
| Pole           | 101977652        | 8339 W. Dry Creek Rd.         | Healdsburg                 |
| Pole           |                  | Across from 8339 W. Dry       | Healdsburg                 |
|                |                  | Creek Rd.                     |                            |
| Pole           | 120186764        | 8339 W. Dry Creek Rd.         | Healdsburg                 |
| Pole           | 102033317        | Across from 8339 W. Dry       | Healdsburg                 |
|                |                  | Creek Rd.                     |                            |
| Pole           | 102033319        | 8383 W. Dry Creek Rd.         | Healdsburg                 |
| Pole           |                  | 1 pole north of 8383 W. Dry   | Healdsburg                 |
|                |                  | Creek Rd.                     |                            |
| Pole           |                  | 173 Presidential Circle       | Healdsburg                 |
| Pole           |                  | 2579 North Fitch Mountain Rd. | Healdsburg                 |
| Pole           |                  | Across from 2567 N. Fitch     | Healdsburg                 |
|                |                  | Mountain Rd.                  | TT 111                     |
| Pole           |                  | 2567 N Fitch Mountain Rd.     | Healdsburg                 |
| Pole           |                  | 1 pole west of 2567 N. Fitch  | Healdsburg                 |
|                |                  | Mountain Rd.                  | TT==1:1-1                  |
| Pole           |                  | 2439 N. Fitch Mountain Rd.    | Healdsburg                 |
| Pole           |                  | 2414 N. Fitch Mountain Rd.    | Healdsburg                 |
| Pole           |                  | 14475 Cherry St.              | Guerneville                |
| Pole           | 120002847        | 14507 Cherry St.              | Guerneville<br>Guerneville |
| Pole           | 120092847        | 14509 Cherry St.              | Guernevine                 |
| Pole           |                  | 14514 Cherry St.              | Guerneville                |
| Pole           |                  | 14551 Cherry St.              | Guerneville                |
| Pole           |                  | 14576 Cherry St.              | Guerneville                |
| Pole           |                  | 14615 Cherry St.              | Guerneville                |
| Pole           |                  | 20406 Bohemian Highway        | Monte Rio                  |
| Pole           |                  | 13450 Pocket Dr.              | Guerneville                |
| Padmounted     | T4664            | 224 0311 ; 04                 | Santa Rosa                 |
| Transformer    |                  | 334 O'Hair Ct.                |                            |
| Padmounted     | T3241            | 327 O'Hair Ct.                | Santa Rosa                 |
| Transformer    |                  | 327 O Hall Ct.                |                            |
| Padmounted     | T4944            | 2999 Dutton Ave.              | Santa Rosa                 |
| Transformer    |                  | 2999 Dutton Ave.              |                            |
| Padmounted     | T6884            | 2995 Dutton Ave.              | Santa Rosa                 |
| Transformer    |                  | 2773 Datton 11vo.             |                            |
| Padmounted     | T3514LB          | 3017 Dutton Ave.              | Santa Rosa                 |
| Transformer    |                  | 551, 24001111751              |                            |
| Padmounted     | T6977            | 3020 Dutton Ave.              | Santa Rosa                 |
| Transformer    | 40407177         |                               |                            |
| Pole           | 101951335        | 933 Dutton Ave.               | Santa Rosa                 |
| Pole           |                  | 940 Dutton Ave.               | Santa Rosa                 |
| Pole           |                  | 519 Earle St.                 | Santa Rosa                 |
| Pole           |                  | 3575 Valley View Dr.          | Santa Rosa                 |

| Pole |           | 4445 Yukon Dr.                   | Santa Rosa |
|------|-----------|----------------------------------|------------|
| Pole |           | 2600 Trinity Rd.                 | Glen Ellen |
| Pole |           | 1 pole north of 2600 Trinity Rd. | Glen Ellen |
| Pole |           | 2585 Trinity Rd.                 | Glen Ellen |
| Pole |           | 2575 Trinity Rd.                 | Glen Ellen |
| Pole | 120041091 | 1 pole next to 2575 Trinity Rd.  | Glen Ellen |
| Pole |           | 13285 Arnold Dr.                 | Glen Ellen |
| Pole |           | 12350 Margie Ln.                 | Glen Ellen |
| Pole |           | 1 Morning Sun Dr.                | Petaluma   |
| Pole |           | 115 Sunny Hill Dr.               | Petaluma   |
| Pole |           | 116 Sunny Hill Dr.               | Petaluma   |
| Pole |           | 120 Sunny Hill Dr.               | Petaluma   |
| Pole |           | 125 Sunny Hill Dr.               | Petaluma   |
| Pole |           | 523 Webster St.                  | Petaluma   |
| Pole |           | 858 Cherry St.                   | Petaluma   |
| Pole |           | 819 Chileno Valley Rd.           | Petaluma   |
| Pole |           | 628 N. Fair St.                  | Petaluma   |

## IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

## 1. GO 95, Rule 56.2, Use of Overhead Guys, Anchor Guys and Span Wires states in part:

"Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44."

The pole located at 2585 Trinity Rd., in Glen Ellen had a primary guy wire that was not taut.

#### 2. GO 95, Rule 56.7-B, Location of Sectionalizing Insulators for Anchor Guys states in part:

"In order to prevent trees, buildings, messengers, metal-sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule."

The following poles located at the below addresses had vegetation in contact with a section above the sectionalizing insulator of the anchor guy:

- 2567 N. Fitch Mountain Rd., Healdsburg
- 120 Sunny Hill Dr., Petaluma

### 3. GO 95, Rule 54.6-B, Vertical and Lateral Conductors, Ground Wires states in part:

"... That portion of the ground wire attached on the face or back of wood cross arms or on the surface of wood poles and structures shall be covered by a suitable protective covering (see Rule 22.8)..."

The following poles located at the below addresses had exposed and/or damaged ground molding:

- 14615 Cherry St., Guerneville
- 1 Morning Sun Dr., Petaluma
- 116 Sunny Hill Dr., Petaluma

#### 4. GO 95, Rule 56.9, Guy Marker states:

"A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker."

A pole located across from W. Dry Creek Rd. in Healdsburg had an anchor guy with a broken guy marker.

A pole located at 2585 Trinity Rd. in Glen Ellen had an anchor guy with a broken guy marker.

# 5. GO 95, Rule 56.4-C4, Clearances From Conductors Passing on Same Poles states in part:

"The radial clearances between guys and conductors supported by or attached to the same poles or cross arms shall not be less than as specified in Table 2, Case 19." – Column C, 3 inches."

A pole located at 2439 N. Fitch Mountain Rd. in Healdsburg had an anchor guy wire is in contact with the communication cable.

## 6. GO 95, Rule 54.8-B2b, Minimum Vertical Ground Clearance on Residential Premises states:

"Over private driveways or lanes or other private property areas accessible to vehicles on premise used for residential purposes only, service drops shall have a vertical clearance not less than 12 feet."

A pole located at 14509 Cherry St. in Guerneville had a service drop with a vertical ground clearance measured at 9 feet and 8 inches above the driveway.

A pole located at 940 Dutton Ave. in Santa Rosa had a service drop with a vertical ground clearance measured at 9 feet and 2 inches above the driveway.

#### 7. GO 95, Rule 35, Vegetation Management states in part:

"When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines, said tress or portions thereof should be removed."

A dead pine tree is leaning and has the potential to bring down PG&E's electric facilities at 13285 Arnold Dr. in Glen Ellen. In reviewing EC Notification #111868261, PG&E has documented this issue but has listed this notification as being cancelled.

### 8. GO 95, Rule 31.1 Design, Construction and Maintenance states in part:

"Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service."

A pole located at 14576 Cherry St. in Guerneville had a primary cross arm that was rotten.

A pole located at 20406 Bohemian Highway in Monte Rio is broken at the communication level.

A pole located at 2600 Trinity Rd. in Glen Ellen has woodpecker damage.

A pole located at 115 Sunny Hill Dr. in Petaluma has an anchor guy in contact with the secondary crossarm.

A pole located at 116 Sunny Hill Dr. in Petaluma has an anchor guy in contact with the primary crossarm.

A pole located at 14475 Cherry St. in Guerneville has an anchor guy anchor buried in the ground.

A pole located at 1 Morning Sun Drive in Petaluma has an anchor guy anchor buried in the ground.